

### REMARKS

Claims 6-13, 16-24, 26-29 and 31-37 are pending in the present application. By this Amendment, previously presented claims 6, 28-29, 31 and 35 are amended; and new claims 36-37 are added. Applicant respectfully requests reconsideration of the present claims in view of the foregoing amendment and the following remarks.

#### I. Prior Art Rejections:

##### Claim Rejections Under 35 U.S.C. §102(b) or (e)

Previously presented claim 29 was rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,616,192 to Sinclair (hereinafter, "Sinclair") or U.S. Patent No. 3,679,510 to Conley et al. (hereinafter, "Conley").

Previously presented claims 29 and 31 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,126,188 to Shimizu et al. (hereinafter, "Shimizu").

All of the above rejections under 35 U.S.C. §102 are respectfully traversed for at least the following reasons.

In order for any one of the disclosures of Sinclair, Conley or Shimizu to anticipate Applicant's claimed invention as embodied in independent claim 29, the disclosure of Sinclair, Conley, or Shimizu must disclose each and every claim feature recited in independent claim 29.

Each of the disclosures of Sinclair, Conley, and Shimizu fails to teach or suggest at least the following claim feature recited in independent claim 29: a method for modifying the surface of a substrate comprising the step of placing on the surface an article comprising (i) a melt-flowable composition, and (ii) a dimensionally stable film above said melt-flowable composition and comprising a substantially smooth, paint-receptive upper surface comprising a thermosetting epoxy-polyester blend.

Given the failure to disclose all of the claim features recited in independent claim 29, each of the disclosures of Sinclair, Conley and Shimizu cannot anticipate Applicant's claimed invention as embodied in amended independent claim 29. Since claim 31 depends from independent claim 29, and recites additional claim features, the disclosure of Shimizu cannot

anticipate Applicant's claimed invention as embodied in dependent claim 31. Accordingly, withdrawal of all of the above rejections under 35 U.S.C. §102 is respectfully requested.

Previously presented claims 6, 8, 16-17, 19-24, and 34 were rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent Application No. 3-273975 (hereinafter, "JP'975").

In order for the disclosure of JP'975 to anticipate Applicant's claimed invention as embodied in independent claim 6, the disclosure of JP'975 must disclose each and every claim feature recited in independent claim 6.

The disclosure of JP'975 fails to disclose, teach or suggest each and every feature recited in independent claim 6. For example, JP'975 fails to disclose:

(1) a method for modifying a surface of a step joint in a vehicle body comprising the step of placing a sheet material on the surface of the step joint, wherein the sheet material comprises a dimensionally stable film that is sufficiently dimensionally stable so as not to melt and flow or exhibit wrinkling when heated to a melt sealing temperature of the melt-flowable composition and subsequently cooled; or

(2) a method for modifying a surface of a step joint in a vehicle body comprising heating a sheet material (comprising a melt-flowable composition and a dimensionally stable film) to a melt sealing temperature sufficient to cause the melt-flowable composition to melt, flow and level out over surface imperfections or fill gaps in the step joint, as well as adhere and form a bond to the step joint.

From page 4, line 21 to page 5, line 2 of the April 12, 2006 Office Action, in referring to the teachings of JP'975, Examiner Johnstone states:

...and the tape softens (but does not melt) during baking but hardens after cooling to ordinary temperature (translation p. 8) (therefore the base film is "dimensionally stable" by applicants' definition, specification p. 27 lines 11-19 and p. 28 lines 9-13, and could have no substantial shrinkage during the baking step due to the required even appearance of the coatings.)

As noted by Examiner Johnstone, JP'975 fails to disclose a heating step wherein the disclosed tape 4 is heated to a temperature sufficient to cause tape 4 to melt. In addition, JP'975 specifically discloses that "The tape 4 was once softened at the time of the baking

process, but it was hardened when it becomes ordinary temperature.” See, page 8, lines 7-8 of the English translation. If tape 4 softens but does not melt, then JP’975 cannot be seen as disclosing, teaching or suggesting heating the tape 4 to a temperature sufficient to cause any part of the layer 4 to “melt, flow and level out over surface imperfections or fill gaps in the step joint, as well as adhere and form a bond to the step joint”, as recited in step (b) of independent claim 6.

JP’975 specifically discloses that all of tape 4 softens and does not suggest in any way that a portion of tape 4 melts, while another portion of tape 4 remains dimensionally stable. In fact, the disclosure of JP’975 suggests just the opposite. In JP’975, both of tape layers 4a and 4b can comprise the same type of material. See, for example, page 6, lines 17-23 of the English translation, wherein JP’975 discloses that layer 4a and layer 4b may both comprise a urethane. If the two layers 4a and 4b comprise the same type of material, they should behave similarly when heated. In addition, when describing the top layer 4a, JP’975 makes no distinction between the use of a “hot-melt film” and a “urethane film”. Even if the original Japanese language specification was translated inaccurately such that the term “soften” should have been “melt”, which is denied, this would mean that JP’975 taught that all of tape 4 melts when heated. Clearly, the present claimed method is distinguishable either way.

Given the failure of the disclosure of JP’975 to disclose each and every claim element recited in independent claim 6, the disclosure of JP’975 cannot anticipate Applicant's claimed invention as embodied in amended independent claim 6. Since claims 8, 16-17, 19-24, and 34 depend from independent claim 6, and recite additional claim features, the disclosures of JP’975 cannot anticipate Applicant's claimed invention as embodied in dependent claim 8, 16-17, 19-24, and 34. Accordingly, withdrawal of this rejection under 35 U.S.C. §102(b) is respectfully requested.

#### Claim Rejections Under 35 U.S.C. §103(a)

Previously presented claims 6, 8, 12-13, 16-17, 19-24, and 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP’975.

Previously presented claims 7, 9 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP’975, and further in view of U.S. Patent No. 4,822,683 to Schappert et

al. (hereinafter, "Schappert") and U.S. Patent No. 4,920,182 to Manser et al. (hereinafter, "Manser").

Previously presented claims 10-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'975, and further in view of U.S. Patent No. 4,877,679 to Leatherman et al. (hereinafter, "Leatherman1") and U.S. Patent No. 4,892,779 to Leatherman et al. (hereinafter, "Leatherman2").

Previously presented claims 18, 29 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'975, and further in view of Manser and Japanese Patent Application No. 58-217516 (hereinafter, "JP'516").

Previously presented claim 32 was rejected under 35 U.S.C. §103(a) as being unpatentable over JP'975, and further in view of European Patent Application No. 0 384 598 A1 (hereinafter, "EP'598").

Previously presented claims 26-27 and 33 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'975, and further in view of Manser and Japanese Patent Application No. 1-152049 A (hereinafter, "JP'049").

Previously presented claim 35 was rejected under 35 U.S.C. §103(a) as being unpatentable over JP'975, and further in view of Schappert, Manser and JP'049.

Previously presented claims 6, 8, 12-13, 16-17, 20-24, 26-27, and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and U.S. Patent No. 5,162,149 to Reaney (hereinafter, "Reaney").

Previously presented claims 7, 9, 28 and 35 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and Reaney, and further in view of Schappert and Manser.

Previously presented claims 10-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and Reaney, and further in view of Leatherman1 and Leatherman2.

Previously presented claims 18, 29 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and Reaney, and further in view of Manser and JP'516.

Previously presented claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and Reaney, and further in view of JP'975.

Previously presented claim 32 was rejected under 35 U.S.C. §103(a) as being unpatentable over JP'049 in view of Shimizu and Reaney, and further in view of EP'598.

Previously presented claims 29 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shimizu.

Previously presented claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sinclair or Conley, and further in view of U.S. Defensive Publication No. T867,006 to Kaul (hereinafter, "Kaul"), U.S. Patent No. 2,631,947 to Kline et al. (hereinafter, "Kline"), and U.S. Patent No. 2,647,849 to Douglas et al. (hereinafter, "Douglas").

Previously presented claims 29 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,739,919 to Artzt (hereinafter, "Artzt") in view of Manser and JP'516.

All of the above rejections under 35 U.S.C. §103(a) are respectfully traversed for at least the following reasons.

Rejection of Previously Presented Independent Claim 6 and Its Dependent Claims:

Regarding the rejection of independent claim 6 under 35 U.S.C. §103(a) as being unpatentable over the teaching of JP'975 in combination with one or more of the teachings of Schappert, Manser, Leatherman1, Leatherman2, JP'516, EP'598, and JP'049, it should be noted that the teaching of JP'975 specifically discloses a two-layer tape structure that softens, but does not melt as noted by Examiner Johnstone and as discussed above. Further, the teaching of JP'975 fails to disclose, teach or suggest a tape structure comprising (i) a dimensionally stable film that remains dimensionally stable at a melt sealing temperature in combination with (ii) a melt-flowable composition that melts, flows and levels out over surface imperfections at the melt sealing temperature as recited in independent claim 6.

It should be further noted that each of the teachings of Schappert, Manser, Leatherman1, Leatherman2, JP'516, EP'598, and JP'049, which are used in combination with JP'975, also fails to teach or suggest the Applicant's claimed invention as recited in independent

claim 6. The teachings of Schappert, Manser, Leatherman1, Leatherman2, JP'516, and EP'598 are directed to various articles comprising an adhesive composition, but have nothing to do with vehicles, and especially a method for modifying a surface of a step joint in a vehicle body. The teaching of JP'049 is directed to a production method for making an automotive roof part, wherein the production method comprises placing a thermosettable rod within a roof ditch groove, and heating/curing the thermosettable rod so as to cause the rod to melt flow and seal surfaces of the roof ditch. Like the teaching of JP'975, the teaching of JP'049 fails to disclose, teach or suggest a thermosettable rod comprising a dimensionally stable film as recited in independent claim 6.

Examiner Johnstone suggests that one of ordinary skill in the art would have been motivated to substitute a dimensionally stable film for the hot-melt base film layer in the tape structure of JP'975 because dimensionally stable films are well known in the art. See, for example, beginning on page 5, line 21 of the April 12, 2006 Office Action where Examiner Johnstone states:

As to claims 12 and 13, oriented polyethylene terephthalate film such as MYLAR is notoriously well known to have dimensional stability, therefore it would have been obvious to one of ordinary skill in the art to use such notoriously well known dimensionally stable oriented polyethylene terephthalate film as the hot-melt base film in the above method.

Applicant disagrees.

Applicant respectfully submits that the art of record fails to suggest the desirability of such a modification of the teaching of JP'975 as suggested by Examiner Johnstone. As stated by the Court in *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990), "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (In *Mills*, claims were directed to an apparatus for producing an aerated cementitious composition by drawing air into the cementitious composition by driving the output pump at a capacity greater than the feed rate. The prior art reference taught that the feed means can be run at a variable speed, however the court found that this does not require that the output pump be run at the claimed speed so that air is drawn into the mixing chamber and is entrained in the ingredients

during operation. Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *Id.* at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

Further, Applicant respectfully submits that the teaching of JP'975 teaches away from such a proposed modification, as suggested by Examiner Johnstone, given that the teaching of JP'975 specifically discloses a base film layer in the form of a hot-melt layer, not a dimensionally stable film. Applicant submits that such a modification of the teaching of JP'975 would change the principle of operation of the teaching of JP'975. The Federal Courts have frowned on such a modification of the prior art. As stated by the Court in *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious."

Regarding the rejection of independent claim 6 under 35 U.S.C. §103(a) as being unpatentable over the teaching of JP'049 in combination with one or more of the teachings of Shimizu, Reaney, Schappert, Manser, Leatherman1, Leatherman2, JP'516, JP'975, and EP'598, Applicant respectfully submits that the art of record fails to teach or suggest the proposed modification of the teaching of JP'049, as suggested by Examiner Johnstone, and the desirability of such a modification. There is no suggestion in the teaching of JP'049 of a dimensionally stable film, the use of a dimensionally stable film in a method for modifying the surface of a step joint in a vehicle body, or the desirability or need for using such a dimensionally stable film in a method for modifying the surface of a step joint in a vehicle body. The only suggestion of the desirability or need for using such a dimensionally stable film in a method for modifying the surface of a step joint in a vehicle body has been gleaned from Applicant's own specification, not from what is suggested in the art of record.

Rejection of Previously Presented Independent Claim 28:

Regarding the rejection of independent claim 28 under 35 U.S.C. §103(a) as being unpatentable over (1) the teaching of JP'975 in combination with Schappert and Manser, or (2)

the teaching of JP'049 in combination with Shimizu, Reaney, Schappert, and Manser, it should be noted, as discussed above, that each of the teachings of JP'975 and JP'049 fails to teach or suggest the use of a dimensionally stable film in a sheet material for modifying a surface forming part of a vehicle, and especially the use of a dimensionally stable film in the form of an oriented polyester film as recited in independent claim 28. Further, each of the teachings of JP'975 and JP'049 fails to teach or suggest the use of a sheet material comprising a melt-flowable composition in the form of a semi-crystalline, thermosetting epoxy-polyester blend as recited in independent claim 28. In fact, the teaching of JP'975 specifically discloses the use of a nylon 12 melt-flowable composition, not a semi-crystalline, thermosetting epoxy-polyester blend.

For reasons similar to those given above, the art of record fails to teach or suggest Applicant's claimed method for modifying the surface of a vehicle, as well as the desirability of such a method. The only suggestion of such a method for modifying the surface of a vehicle has been gleaned from Applicant's own specification, not from what is suggested in the art of record.

Rejection of Previously Presented Independent Claim 29 and Its Dependent Claims:

Regarding the rejection of independent claim 29 under 35 U.S.C. §103(a) as being unpatentable over (1) the teaching of JP'975 in view of Manser and JP'516, or (2) the teaching of JP'049 in view of Shimizu, Reaney, Manser and JP'516, or (3) the teaching of Shimizu, or (4) the teachings of Sinclair or Conley, further in view of Kaul, Kline, and Douglas, or (5) the teaching of Artzt in view of Manser and JP'516, it should be noted, as discussed above, that each of the teachings of JP'975 and JP'049 fails to teach or suggest the use of a dimensionally stable film in a sheet material for modifying the surface of a substrate, and especially the use of a dimensionally stable film having a paint-receptive upper surface comprising a thermosetting epoxy-polyester blend as recited in independent claim 29. It should be further noted that each of the teachings of Manser, JP'516, Shimizu, Reaney, Sinclair, Conley, Kaul, Kline, Douglas, and Artzt fails to teach or suggest the use of a dimensionally stable film in a sheet material for modifying the surface of a substrate, wherein the sheet material further comprises a paint-receptive upper surface comprising a thermosetting epoxy-polyester blend as recited in independent claim 29.



For reasons similar to those given above, the art of record fails to teach or suggest Applicant's claimed method for modifying the surface of a substrate, as well as the desirability of such a method. The only suggestion of such a method for modifying the surface of a substrate has been gleaned from Applicant's own specification, not from what is suggested in the art of record.

For at least the reasons given above, Applicant respectfully submits that Examiner Johnstone has failed to make a *prima facie* case of obviousness based on the combination of any of the teachings of JP'975, Schappert, Manser, Leatherman1, Leatherman2, JP'516, EP'598, JP'049, Shimizu, Reaney, Sinclair, Conley, Kaul, Kline, Douglas, and Artzt. There is no suggestion or motivation to combine select features of the above-described references as suggested by Examiner Johnstone other than the description of Applicant's own invention. Accordingly, withdrawal of these rejections is respectfully requested.

## II. New Claims 36-37:

New claims 36-37 are directed to further embodiments of Applicant's claimed invention. Support for new claims 36-37 may be found in at least the following locations of the original specification: page 8, lines 12-29, and page 14, lines 3-10 (claims 36-37).

New claims 36-37 are allowable over the art of record for at least the reasons given above.

## III. Conclusion:

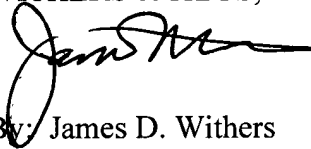
For at least the reasons given above, Applicant respectfully submits that claims 6-13, 16-24, 26-29 and 31-37 define patentable subject matter. Accordingly, Applicant respectfully requests allowance of these claims.

Applicant encloses a check in the amount of \$100 for new dependent claims 36-37. Applicant also encloses a check in the amount of \$120 for the attached request for a one month extension of time. No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 503025.

Amendment And Response  
Serial No. 08/421,055

Should Examiner Johnstone believe that anything further is necessary to place the application in better condition for allowance, Examiner Johnstone is respectfully requested to contact Applicant's representative at the telephone number listed below.

Respectfully submitted,  
WITHERS & KEYS, LLC



By: James D. Withers  
Reg. No. 40,376

WITHERS & KEYS, LLC  
235 Bryan Street  
McDonough, Georgia 30253  
678-565-4748  
Attorney No. 10002.0098US01

3M Docket No.: 49286US003